## THANK YOU!

Thank you for attending the safety meeting on the topic of FIRE SAFETY.

As a reminder, here is the material we covered.

## Flammable liquid safety

Flammable liquids, although very common in almost every workplace, are dangerous. Flammable liquids can explode or burn very fast. The fire gives off a lot of heat and often thick, black, toxic smoke. Special care and attention are a must when using, storing or disposing of flammable liquids.

Solvents, thinners, cleaners, oil-based paints and gasoline are all considered flammable liquids — liquids that can burn. However, it is not the liquid that burns; it is the vapors in the air that burn if they come into contact with an ignition source.

Classification of flammable liquids is determined by their flashpoint. Flashpoint is the lowest temperature at which vapors from the liquid can be ignited. Gasoline, for example, has a flashpoint of –40C or –40F, which means gasoline vapors can ignite in just about any climate.

## It takes four components to make a fire. These are oxygen, a source of ignition, fuel and a chemical reaction.

- Oxygen is always present in the air.
- The source of ignition can be a spark, static electricity, friction, a match or a hot surface.

- Fuel can be the vapors given off by a flammable liquid such as gasoline or benzene.
- When these elements come together, they create a chemical reaction and fire is the result.
- The best way to avoid fire with flammable liquid is to keep these components separate. Here are some suggestions on how to do that:
- Keep flammable liquids in approved, closed containers when not in use.
   A proper container should have a self-closing cover, a venting device and a flame arrester. The container should also be leak-proof and resistant to corrosion. Storage areas must be designated, cool, dry, well-ventilated and easily accessible.
- Promptly clean up all spills of flammable liquids. Dispose of waste in approved containers.
- Carefully read the material safety data sheets (MSDS) accompanying the flammable liquid you are working with. The MSDS will indicate the proper personal protective equipment to wear. If you do not understand the MSDS, ask your supervisor to go over it with you.

- Use the least hazardous material to do your job.
- Work in well-ventilated areas, especially when dealing with flammable liquids.
- Keep flammable liquids away from all possible sources of ignition including static electricity or sparks and hot equipment such as furnaces or steam pipes.
- Containers of flammable materials must be totally purged or flushed to remove vapors. Then and only then can the container be considered empty.
- Flammable liquids must only be used as they are intended. For example, never use gasoline as a cleaner.
- Don't smoke around flammable liquids.
- Do not dispose of flammable liquids by dumping them down the drain. Most communities have strict environmental laws in place that will guide you in the best possible way to dispose of flammable liquids.

Flammable liquids are dangerous and should never be taken for granted. Learn all you can about the flammable liquids you come in contact with. Know how to handle them properly and how to use them safely.

